

**REMARKS**

Claims 1-4, 6, 8 and 13-15 are pending. By this Amendment, claims 13-15 are amended. No new matter has been added.

For at least the following reasons, Applicants submit that this application is in condition for allowance. Reconsideration of claims 1-4, 6, 8 and 13-15 is respectfully requested.

**I. REPLY TO REJECTIONS**

On page 2, item 3 of the Office Action, claims 13-15 are rejected under 35 U.S.C. §112, second paragraph, as indefinite. The claims are amended to obviate the rejection. Withdrawal of the rejection of claims 13-15 is respectfully requested.

In item 5 of the Office Action, claims 1-4, 6, 8 and 13-15 are rejected under 35 U.S.C. §103(a) as obvious over U.S. Patent No. 3,170,499 to Deist taken alone or further in view of U.S. Patent No. 2,849,049 to Hanson and U.S. Patent No. 6,039,826 to Okada. The rejection is respectfully traversed.

Applicants respectfully submit that Deist by itself or in combination with Hanson or Okada fails to render obvious the subject matter recited in claim 1. Specifically, Deist, Hanson or Okada fails to teach, disclose or suggest a method of laminating band shaped uncured rubber materials to form a laminated rubber member having a given sectional shape by helically winding a band-shaped uncured rubber material extruded through an extruder on a rotating support, which comprises using two or more rubber compositions indicating different moduli after the curing as a rubber material fed to the extruder, extruding a first rubber material through the extruder as a first band shaped rubber member and helically winding the first band shaped rubber member on the rotating support along a rotating axial direction of the support so as to overlap at least widthwise edge portions of the wound rubber members with each other to form a first rubber layer, and continuously extruding the first

rubber material and adding a second rubber material through the extruder to create a blend of the first rubber material and the second rubber material, and stepwise or gradually increasing a blending ratio of the second rubber material to the first rubber material as a second band-shaped member while holding the same extrusion sectional shape and helically winding on the first rubber layer while overlapping with at least part of the first rubber layer and overlapping at least widthwise edge portions of the wound second-band shaped rubber member with each other to form a second rubber layer, as recited in claim 1.

Deist is directed towards using a blending mill 10 which combines rubbers supplied from a plurality of breakdown mills 40, 41 and 42 in the form of rubber strips and after blending the rubber which is further transported to a ribbon calendar 24 for strips 35 to be drawn for final application on a tire carcass (Fig. 1). Thus, Deist fails to disclose an extruder or a method for applying the strip of rubber onto a rotating support. Thus, Deist, alone fails to teach each and every feature recited in claim 1.

With respect to the alleged teaching in Deist that provides for replacing of the one or more mills with extruders, Applicants respectfully submit that a *prima facie* case of obviousness has not been shown. For one thing, Deist basically discloses a method and problems that were described in the specification regarding JP-B-40-24384 of the use of mills (see page 3, first and second full paragraphs).

Further, Deist teaches away from the invention. Specifically, Deist only mentions in passing that extruder means may be used in place of one or more of the mills and calendar (see col. 7, lines 34-40), which suggests a device still similar to that shown in Fig. 1 of Deist. Namely, the blending mills 40, 41 and 42 will become extruders, extruding a strip of rubber 52 that will then be combined in a separate extruder which replaces the blending mill 10 which again will extrude a strip of rubber that will be taken to an extruder that replaces the ribbon calendar 24. Thus, the logical conclusion of the suggestion in Deist is to

provide five separate extruders. As such, the suggestion in Deist regarding the extruder does not teach the invention.

Further, Applicants note that Hanson was patented fully seven years before Deist and Deist specifically references Hanson, which uses extruders but Deist did not incorporate the teaching in Hanson to combine the elements as alleged in the Office Action. Further, Applicants note that both Hanson and Deist are assigned to the Firestone Tire and Rubber Company, and despite the availability of the teaching in Hanson, Deist fails to incorporate the teachings of Hanson. Thus, Applicants respectfully submit that the failure to combine the teachings of Hanson by Deist suggests that Deist did not believe the use of extruders was appropriate or using a single gradually blending extruder as being effective for the purpose sought by Deist. As such, Applicants respectfully submit that this fact shows that Deist teaches away from the application.

Further, with respect to Fig. 2 of Deist, Applicants respectfully submit that shown in Fig. 2 of Deist are three hoppers 75, 76 and 77, each provided with different type rubbers A, B and C, and Deist discloses A, B and C are supplied sequentially, and only after supply of the previous rubber pellets is stopped (col. 6 line 48-col. 7, line 2). Although Deist does disclose that there is a blended section of the strip (col. 7, lines 9-10), the method of adding pellets sequentially, and only after the supply of previous supply is stopped suggests that the blended section is abrupt, i.e., at an interface between the different pellet feeds, rather than discrete steps or gradual as claimed in claim 1. Deist specifically discloses that when a portion of a tire is built using a specific stock of pellet, the supply of that specific stock of pellet is terminated and the supply of stock of a different pellet is commenced (see col. 6, lines 60-70). Any blended section resulting from the above process will have a very abruptly changing composition from a first stock to a second stock as the second stock is abruptly added into the blending mill from the hoppers after termination of the first stock.

Further, Applicants submit that any disclosure specific to each of the two embodiments must be limited to that particular embodiment. Specifically, the gradual changing of the composition is only workable in the first embodiment of Deist where breakdown mills are used. In the second embodiment of Deist where hoppers are used, the sequential adding of stock of pellet, as disclosed, create an abrupt change in the composition of the rubber.

If only a particular portion of the disclosure is used, even though another portion of the disclosure clearly is inconsistent, then the Office is using hindsight reconstruction to pick and choose elements, rather than looking at the motivation to combine.

As to the alleged combination of Okada with Deist, Applicants respectfully submit that a *prima facie* case of obviousness has not been presented. Applicants respectfully submit that Okada is directed towards a method of forming a green tire by winding green rubber first on an adjusting drum upon extrusion from an extruder in a length corresponding to the rubber quantity of a tire and then unwinding the rubber strip from the adjusting drum onto the outer circumference of a rotary support member in order to build up the tire (see col. 1, lines 61-col. 2, line 3). Thus, in Okada, the extruded rubber is not directly wound on the outer circumference of the rotary support member, but is wound temporarily on the adjusting drum in the rubber quantity necessary for the tire constituent portion and is then wound on the outer circumference of the rotary support member to form the tire constituent portion (see col. 2, lines 4-10). To directly wind the extruded rubber onto the circumference of the rotary support member would be against the teaching found in Okada. Thus, Okada cannot provide the motivation for combining its teaching with Deist. As such, claim 1 is distinguishable over the applied references. Further, claims 2-4, 6, 8 and 13-15, which depend from claim 1, are likewise distinguishable over the applied references for at least the reasons discussed

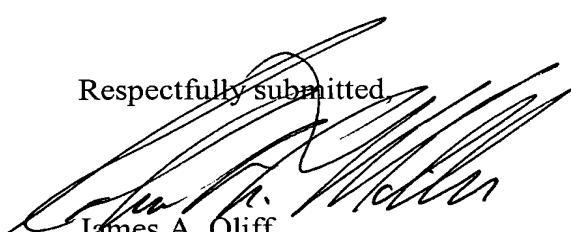
above and for the additional features they recite. Withdrawal of the rejection of claims 1-4, 6, 8 and 13-15 is respectfully requested.

**II. CONCLUSION**

In view of the foregoing remarks, Applicants respectfully submit that this application is in condition for allowance. Favorable reconsideration and prompt allowance of claims 1-4, 6, 8 and 13-15 is respectfully requested.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact Applicants' undersigned representative at the telephone number listed below.

Respectfully submitted,

  
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